

Sn. 09/844,481

Attorney Docket No. FUJI:185

wherein the alternating conductivity type layer comprises first semiconductor regions of a first conductivity type and second semiconductor regions of a second conductivity type;

wherein the first semiconductor regions and the second semiconductor regions are alternately arranged in a surface portion of the major surface;

wherein the alternating conductivity type layer comprises a closed loop formed by the first and second semiconductor regions alternately arranged along the direction of the closed loop and surrounding one of the main electrodes; and

wherein the alternating conductivity type layer comprises at least one straight section and at least one curved section. --

B2 m/c27
--4. (Amended) The lateral semiconductor device according to Claim 1, wherein the alternating conductivity type layer comprises at least two straight sections and at least two curved sections. --

m/c27
--5. (Twice Amended) A lateral semiconductor device comprising:
a semiconductor chip;
two main electrodes on one major surface of the semiconductor chip; and
an alternating conductivity type layer between the main electrodes;

wherein the alternating conductivity type layer comprises first semiconductor regions of a first conductivity type and second semiconductor regions of a second conductivity type;

wherein the first semiconductor regions and the second semiconductor regions are alternately arranged;

wherein the alternating conductivity type layer comprises a closed loop surrounding one of the main electrodes;

wherein the alternating conductivity type layer comprises at least one straight section and at least one curved section; and

wherein the first semiconductor regions and the second semiconductor regions are arranged alternately at a first pitch in the straight section, and the first semiconductor regions and the second semiconductor regions are arranged alternately at a second pitch in

Sn. 09/844,481

Attorney Docket No. FUJI:185

B3

the curved section.--

B4 subc2

--8. (Amended) The lateral semiconductor device according to Claim 6, wherein the curved section is doped substantially more lightly than the straight section.

B4

9. (Amended) The lateral semiconductor device according to Claim 8, wherein the curved section is substantially intrinsic.--

B5 subc2

--11. (Amended) The lateral semiconductor device according to Claim 8, wherein the curved section is doped with an n-type impurity and a p-type impurity.

B6 subc2

12. (Amended) The lateral semiconductor device according to Claim 9, wherein the curved section is doped with an n-type impurity and a p-type impurity.--

B6 subc2

--14. (Amended) The lateral semiconductor device according to Claim 1, further comprising a plurality of closed loops, each including the alternating conductivity type layer.--